



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 10/705,572 | 11/11/2003 | Michael Donovan Mitchell | 8681RCR | 4234 |

27752 7590 12/29/2004

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER

KIM, YOON YOUNG

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1723 | |

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,572

Applicant(s)

MITCHELL ET AL.

Examiner

Yoon-Young Kim

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 7-9 and 13 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 8-15, and 22 of U.S. Patent No.

6,827,854 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose filters for removing microorganisms from a fluid which includes a housing having an inlet and an outlet, a filter material disposed within the housing, wherein the filter material is formed at least in part from a plurality of filter particles consisting of activated carbon.

3. Claims 1-15 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-10, and 12-13 of copending Application No. 10/705,174. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose a filter for providing potable water which includes a housing having an inlet and an outlet, a filter material disposed within the

Art Unit: 1723

housing, the filter material formed at least in part from a plurality of mesoporous, basic, and reduced-oxygen activated carbon filter particles; at least some of the mesoporous activated carbon filter particles being coated with silver or a silver containing material; and kits comprising filters and information relating to the killing or removal of bacteria, viruses, and microbials.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-15 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 8-13, 17-21, 23-24, and 28-33 of copending Application No. 10/464,210. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose a filter for providing potable water which includes a housing having an inlet and an outlet, a filter material disposed within the housing, the filter material formed at least in part from a plurality of mesoporous, basic, and reduced-oxygen activated carbon filter particles.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 5 and 14-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Levy in view of Tremblay et al., U.S. Patent No. 6,660,166 B2.

Regarding Claim 1, Levy discloses a kit comprising: a filter for providing potable water, comprising: a housing (Fig. 1, #11) having an inlet (#32) and an outlet (#33); and a filter material disposed within the housing formed at least in part from a plurality of mesoporous activated carbon filter particles (Col. 11, Lines 53-58). Levy does not disclose a package or a method of communicating information. Tremblay teaches a package for containing the filter; and wherein either the package or the filter housing comprises information that the filter or filter material provides reduction of water contaminants (Col. 5, Line 54 – Col. 6, Line 4). It would have been obvious to one of ordinary skill in the art to modify Levy by adding the elements of Tremblay in order to convey the important benefits of the filter (Col. 5, Lines 63-67).

Regarding Claim 2, Levy discloses the that the sum of the mesopore and the macropore volumes of the plurality of mesoporous activated carbon filter particles is between about 0.2 mL/g and about 2 mL/g (Col. 17, Lines 23-25).

Regarding Claim 5, Levy in view of Tremblay does not disclose the single-collector efficiency or the filter coefficient. Optimum or workable ranges of result-effective variables would be determined to achieve the desired results in the process. In re Boesch, 205 USPQ 215 (CCPA 1980). The filter characteristics used to calculate the single-collector efficiency or the filter coefficient are result-effective variables, and their optimum ranges would have been determined by routine experimentation in order to achieve the desired results in filtration.

Regarding Claims 14-15, Levy does not disclose a package or a method of communicating information. Tremblay teaches a package for containing the filter; and wherein either the package or the filter housing comprises information that the filter or filter material provides reduction of water contaminants (Col. 5, Line 54 – Col. 6, Line 4). It would have been obvious to one of ordinary skill in the art to modify Levy by adding the elements of Tremblay in order to convey the important benefits of the filter (Col. 5, Lines 63-67).

Art Unit: 1723

7. Claims 7-11 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Beauman et al, U.S. Patent No. 4,396,512 in view of Levy, U.S. Patent No. 6,241, 893 B1.

Regarding Claim 7, Beauman discloses a filter for providing potable water, comprising: a housing having an inlet and an outlet (Col. 15, Lines 5-10); and a filter material disposed within the housing formed at least in part from a plurality of activated carbon filter particles and particles selected from the group consisting of activated carbon filter particles coated entirely with silver or a silver containing material, activated carbon filter particles partially coated with silver or a silver containing material, silver particles and mixtures thereof (Col. 14, Lines 10-24). Beauman does not disclose the pore size of the activated carbon filter particles. Levy teaches a water filter that is mesoporous (Col. 20, Lines 8-14). It would have been obvious to one of ordinary skill in the art to modify Beauman by adding the pore size of Levy for optimal filter performance (Col. 11, Lines 53-58).

Regarding Claim 8, Levy discloses the that the sum of the mesopore and the macropore volumes of the plurality of mesoporous activated carbon filter particles is between about 0.2 mL/g and about 2 mL/g (Col. 17, Lines 23-25).

Regarding Claim 9-10, Beauman discloses that the BRI, VRI, F-BLR, and F-VLR values are as claimed by the invention and in compliance with EPA regulations (Col. 3, Lines 8-14).

Regarding Claim 11, Beauman in view of Levy does not disclose the single-collector efficiency or the filter coefficient. Optimum or workable ranges of result-effective variables would be determined to achieve the desired results in the process. In re Boesch, 205 USPQ 215 (CCPA 1980). The filter characteristics used to calculate the single-collector efficiency or the filter coefficient are result-effective variables, and their optimum ranges would have been determined by routine experimentation in order to achieve the desired results in filtration.

Art Unit: 1723

Regarding Claim 13, Beauman discloses a filter for providing potable water, comprising: a housing having an inlet and an outlet (Col. 15, Lines 5-10); and a filter material disposed within the housing formed at least in part from a plurality of activated carbon filter particles and other materials selected from the group consisting of activated carbon powders, activated carbon granules, activated carbon fibers, zeolites, activated alumina, activated magnesia, diatomaceous earth, activated silica, hydrotalcites, glass, polyethylene fibers, polypropylene fibers, ethylene maleic anhydride copolymers fibers, sand, clay and mixtures thereof (Col. 4, Line 67 - Col. 5, Line 2), wherein at least a portion of the other materials are coated with silver or a silver containing material (Col. 14, Lines 10-24). Beauman does not disclose the pore size of the activated carbon filter particles. Levy teaches a water filter that is mesoporous (Col. 20, Lines 8-14). It would have been obvious to one of ordinary skill in the art to modify Beauman by adding the pore size of Levy for optimal filter performance (Col. 11, Lines 53-58).

8. Claims 3-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Levy in view of Tremblay as applied to Claim 1 above, and further in view of Beauman.

Regarding Claim 3-4, Levy in view of Tremblay does not disclose BRI, VRI, F-BLR, and F-VLR values. Beauman discloses that the BRI, VRI, F-BLR, and F-VLR values are as claimed by the invention and in compliance with EPA regulations (Col. 3, Lines 8-14). It would have been obvious to one of ordinary skill in the art to modify Levy in view of Tremblay by adding the BRI, VRI, F-BLR, and F-VLR values of Beauman in order to comply with EPA regulations.

9. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Levy in view of Tremblay as applied to Claim 1 above, and further in view of Denkwicz.

Regarding Claim 6, Levy in view of Tremblay discloses that the plurality of mesoporous activated carbon filter particles are basic (Levy, Col. 35, Lines 11-16) but does not disclose a point zero charge or an ORP. Denkwicz teaches a point zero charge between about 9 and about 12 (Col. 1, Lines 45-51) and an ORP between about 290 mV and about 175 mV (Col. 1, Lines 23-27). Optimum or workable ranges of result-effective variables would be determined to achieve the desired results in the process. In re Boesch, 205 USPQ 215 (CCPA 1980). The point zero charge and ORP are result-effective variables, and their optimum ranges would have been determined by routine experimentation in order to achieve the desired results in filtration.

10. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Beauman in view of Levy as applied to Claim 7 above, and further in view of Denkwicz, Jr. et al., U.S. Patent No. 5,772,896.

Regarding Claim 12, Beauman in view of Levy discloses that the plurality of mesoporous activated carbon filter particles are basic (Levy, Col. 35, Lines 11-16) but does not disclose a point zero charge or an ORP. Denkwicz teaches a point zero charge between about 9 and about 12 (Col. 1, Lines 45-51) and an ORP between about 290 mV and about 175 mV (Col. 1, Lines 23-27). Optimum or workable ranges of result-effective variables would be determined to achieve the desired results in the process. In re Boesch, 205 USPQ 215 (CCPA 1980). The point zero charge and ORP are result-effective variables, and their optimum ranges would have been determined by routine experimentation in order to achieve the desired results in filtration.

Art Unit: 1723

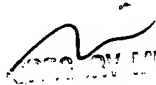
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK
12/22/04


YOUNG YOUNG KIM
SUPERVISOR
TECHNICAL CENTER 1700